

LISTING OF THE CLAIMS

No claims are amended with the instant response.

A copy of all pending claims and a status of the claims are provided below.

1. – 20. (Canceled)

21. (Previously Presented) A method for tailoring information to characteristics of an information user, comprising:

passing a request object excluding any profile elements to an input logic;

receiving the request object and accessing a profile database through a profile database proxy, the profile database containing profile elements that are known to a server but originally excluded from the request object, the profile elements including a user name, network ID, and user interaction history;

incorporating the request object with relevant profile elements of the profile elements found in the profile database;

passing the request object with the relevant profile elements to an arbiter;

actively selecting, by analysis of the relevant profile elements, a personalization engine, which is configured to provide an optimal performance, from a plurality of personalization engines by the arbiter, the arbiter refining and altering a selection based on a number and type of the relevant profile elements, wherein the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, the

collaborative filtering engine provides an optimal performance when information is known about a group of users, the predictive-modeling personalization engine provides an optimal performance when a user is unknown, and the business-rules engine provides an optimal performance when the personalization engine needs to change in response to one or more changing circumstances;

accessing a content database via a content database proxy to retrieve a personalized content object identified by the personalization engine selected by the arbiter; and

passing with the arbiter the personalized content object to an application program,

wherein the arbiter comprises an expert system that is one of rule based, model based, and knowledge based.

22. (Previously Presented) The method of claim 21, further comprising using the arbiter for on-line shopping.
23. (Previously Presented) The method of claim 21, wherein the application program is a web browser.
24. (Previously Presented) The method of claim 21, further comprising sending the request object over a communication network.
25. (Previously Presented) The method of claim 24, wherein the communication network is

the Internet.

26. (Canceled)

27. (Previously Presented) The method of claim 21, wherein the plurality of personalization engines comprises at least two personalization engines selected from the group consisting of a rule-based personalization engine, a predictive-modeling personalization engine, and a collaborative filtering personalization engine.

28. (Previously Presented) The method of claim 21, further comprising the arbiter analyzing at least one of a date of the request object, a user identity, a user shopping history, and a user usage path.

29. (Previously Presented) Apparatus for tailoring information in a combination of hardware and software to characteristics of an information user, the apparatus comprising:

a content database;

an input logic for receiving a request object excluding any profile elements and accessing a profile database through a profile database proxy, the profile database containing profile elements that are known to a server but originally excluded from the request object, the input logic configured to incorporate into the request object any relevant profile elements of the profile elements found in the profile database including a user name, network ID, and user interaction

history;

an arbiter for accepting and analyzing a request object having the relevant profile elements, which is passed by the input logic, the arbiter refining and altering a selection based on a number and type of at least one of the profile elements contained in the request object;

a plurality of personalization engines for selecting at least one personalized content object from the content database, wherein the plurality of personalization engines are a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, the collaborative filtering engine provides an optimal performance when information is known about a group of users, the predictive-modeling personalization engine provides an optimal performance when a user is unknown, and the business-rules engine provides an optimal performance when the personalization engine needs to change in response to one or more changing circumstances;

the arbiter selecting a personalization engine from the plurality of personalization engines, and the selected personalization engine selects the at least one personalization content object from the content database via a content database proxy; and

the arbiter passing the personalized content object to an application program,

wherein the arbiter comprises an expert system that is one of rule based, model based, and knowledge based.

30. (Previously Presented) The apparatus of claim 29, further comprising output logic for passing the at least one personalization content object to an application program over a

communication network.

31. (Previously Presented) The apparatus of claim 30, wherein the communication network is the Internet.

32. (Previously Presented) The apparatus of claim 30, wherein the application program is a web browser.

33. (Previously Presented) The apparatus of claim 29, wherein the arbiter is configured to receive the request object from a user and the profile elements from the profile database.

34. (Previously Presented) The apparatus of claim 29, wherein the arbiter is configured to analyze at least one of a date of the request object, a user identity, a user shopping history, and a user usage path.

35. (Previously Presented) A method for tailoring information delivered to a user, comprising:

passing a request object excluding any profile elements to an input logic;

receiving the request object and accessing a profile database through a profile database proxy, the profile database containing profile elements that are known to a server but originally excluded from the request object, the profile elements including a user name, network ID, and

user interaction history;

incorporating the request object with relevant profile elements of the profile elements found in the profile database;

passing the request object with the relevant profile elements to an arbiter;

selecting with the arbiter a personalization engine by analysis of the relevant profile elements, wherein the personalization engine is at least one of a collaborative filtering engine, a predictive-modeling personalization engine, and a business-rules engine, the collaborative filtering engine provides an optimal performance when information is known about a group of users, the predictive-modeling personalization engine provides an optimal performance when a user is unknown, and the business-rules engine provides an optimal performance when the personalization engine needs to change in response to one or more changing circumstances;

selecting with the personalization engine a personalized content object to tailor information provided to the user, wherein the personalized content object is stored in a content database and accessed via a content database proxy; and

using the arbiter for on-line shopping,

wherein the arbiter comprises an expert system that is one of rule based, model based, and knowledge based.

36. (Previously Presented) The method of claim 35, further comprising the arbiter receiving the request object from a user, and sending the selected personalized content object to the user's application program.

37. (Previously Presented) The method of claim 36, wherein the application program is a web browser.
38. (Previously Presented) The method of claim 35, further comprising the arbiter receiving the profile elements from the profile database.
39. (Previously Presented) The method of claim 35, further comprising sending the request object over a communication network.
40. (Previously Presented) The method of claim 39, wherein the communication network is the Internet.
41. (Previously Presented) The method of claim 21, further comprising using the arbiter for on-line shopping, wherein the application program is a web browser, wherein the request object is an HTTP message and contains data regarding characteristics of a user.
42. (Previously Presented) The method of claim 41, wherein the request object is sent from the application program to a server.
43. (Previously Presented) The apparatus of claim 29 wherein the arbiter is utilized for on-

line shopping, wherein the application program is a web browser, wherein the request object is an HTTP message and contains data regarding characteristics of a user.

44. (Previously Presented) The apparatus of claim 43, wherein the request object is sent from the application program to the server.